05-01-06

AP

AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P. O. Box 7599
Loveland, Colorado 80537-0599

ATTORNEY DOCKET NO. 10040054-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Jogesh Warrior et al.

Serial No.: 10/807,070 **Examiner:** J. L. Robbins

Filing Date: March 23, 2004 **Group Art Unit:** 2857

Title: METHOD OF OPERATING SENSOR NET AND SENSOR APPARATUS

COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria VA 22313-1450

TRANSMITTAL OF APPEAL BRIEF

Sir:

Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on 02 28 2006 .

The fee for filing this Appeal Brief is (37 CFR 1.17(c)) **$500.00**.

(complete (a) or (b) as applicable)

The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.

☐ (a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)(1)-(5)) for the total number of months checked below:

☐	one month	$ 120.00
☐	two months	$ 450.00
☐	three months	$1020.00
☐	four months	$1590.00

☐ The extension fee has already been filled in this application.

☒ (b) Applicant believes that no extension of term is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

Please charge to Deposit Account **50-1078** the sum of $500.00 . At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **50-1078** pursuant to 37 CFR 1.25.

A duplicate copy of this transmittal letter is enclosed.

☒ I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EV568255152US in an envelope addressed to: MS Appeal Brief - Patents Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Deposit: April 28, 2006 **OR**

☐ I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below.

Date of Facsimile:

Typed Name: Laura Horton

Signature: Laura Horton

Respectfully submitted,

Jogesh Warrior et al.

By _____
Jody C. Bishop
Attorney/Agent for Applicant(s)

Reg. No. 44,034

Date: April 28, 2006

Telephone No. (214) 855-8007

AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, Colorado 80537-0599

Docket No.: 10040054-1
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Jogesh Warrior et al.

Application No.: 10/807,070 — Confirmation No.: 2645

Filed: March 23, 2004 — Art Unit: 2857

For: METHOD OF OPERATING SENSOR NET AND SENSOR APPARATUS — Examiner: J. L. Robbins

APPEAL BRIEF

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sirs:

As required under 37 C.F.R. § 41.37(a), this brief is filed within two months of the Notice of Appeal filed in this case on February 28, 2006, and is in furtherance of said Notice of Appeal.

The fees required under 37 C.F.R. § 41.20(b)(2) are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and M.P.E.P. § 1206:

I.	Real Party In Interest
II	Related Appeals and Interferences
III.	Status of Claims
IV.	Status of Amendments
V.	Summary of Claimed Subject Matter
VI.	Grounds of Rejection to be Reviewed on Appeal

I. REAL PARTY IN INTEREST

The real party in interest for this Appeal is:

Agilent Technologies, Inc.

II. RELATED APPEALS, INTERFERENCES, AND JUDICIAL PROCEEDINGS

There are no other appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

A. Total Number of Claims in Application

There are 28 claims pending in application.

B. Current Status of Claims

1. Claims canceled: None
2. Claims withdrawn from consideration but not canceled: None
3. Claims pending: 1-28
4. Claims allowed: None
5. Claims rejected: 1-28

C. Claims On Appeal

The claims on appeal are claims 1-28

IV. STATUS OF AMENDMENTS

Appellant filed a Response After Final Action on January 23, 2006. In an Advisory Action mailed on February 10, 2006 (hereinafter the "Advisory Action"), the Examiner indicated that the Response After Final Action did not place the pending application in condition for allowance. The Response After Final Action did not contain amendments to the claims; as such, the claims on Appeal are as they appeared in the Response After Final Action.

V. SUMMARY OF CLAIMED SUBJECT MATTER

According to claim 1, the method of operating a sensor net comprises: detecting access attempts by one or several mobile devices to multiple nodes within said sensor net (paragraph [0024] lines 12-13, paragraph [0036] lines 2-3, paragraph [0040] lines 1-4); calculating a respective probability of future access by a mobile device for each of said multiple nodes in response to said detecting (paragraph [0022] lines 1-4, paragraph [0024] lines 1-4, paragraph [0040] lines 4-5); communicating information related to said calculated probabilities through said sensor net (paragraph [0022] lines 1-5, paragraph [0024] lines 7-10, paragraph [0038] lines 4-5, paragraph [0040] lines 4-5); and routing measurement data for collection to respective ones of said multiple nodes using said calculated probabilities (paragraph [0023] line 1, paragraph [0025] lines 1-2, paragraph [0028] lines 7-10).

According to claim 3, the method of claim 1 wherein said detecting, calculating, and communicating occur repetitively causing routing of measurement data to vary dynamically in response to changes in access patterns associated with mobile devices (paragraph [0023] lines 9-10, paragraph [0027] lines 8-10).

According to claim 4, the method of claim 1 wherein said routing measurement data varies in response to the time of day when said routing is performed (paragraph [0022] lines 8-10).

According to claim 6, the method of claim 1 wherein said communicating calculated probabilities comprises: receiving a first portion of said information at a first node in said sensor net (paragraph [0028], paragraph [0030], paragraph [0032]); selecting a second portion from said first portion of information using calculated probabilities of future access

(paragraph [0028], paragraph [0030], paragraph [0032]); and transmitting said second portion from said first node to a second node in said sensor net (paragraph [0028], paragraph [0030], paragraph [0032]).

According to claim 7, the method of claim 6 wherein said selecting removes information from said first portion using a cost function (paragraph [0028]).

According to claim 8, the method of claim 7 wherein said cost function calculates a path cost to a collection point (paragraph [0030]).

According to claim 9, the method of claim 8 wherein said cost function is a function of communication hops to a collection point (paragraph [0025], paragraph [0030]).

According to claim 16, a sensor device for operation in a sensor net comprises: means for detecting and recording attempts to access measurement data by mobile devices (paragraph [0024] lines 12-13, paragraph [0036] lines 2-3, paragraph [0040] lines 1-4); means for calculating a probability of future access by a mobile device to said sensor device using said recorded access attempts (paragraph [0022] lines 1-4, paragraph [0024] lines 1-4, paragraph [0040] lines 4-5); means for receiving information related to probabilities of future access associated with other sensor devices within said sensor net (paragraph [0028] line 3, paragraph [0032] lines 2-3, paragraph [0036] lines 3-5, paragraph [0037 lines 1-2]); means for communicating information related to probabilities of future access to other sensor devices (paragraph [0022] lines 1-5, paragraph [0024] lines 7-10, paragraph [0038] lines 4-5, paragraph [0040] lines 4-5); and means for routing measurement data within said sensor net in response to said means for calculating and said means for receiving (paragraph [0023] line 1, paragraph [0025] lines 1-2, paragraph [0028] lines 7-10).

According to claim 18, the sensor device of claim 16 wherein probabilities of access are correlated to a time of day (paragraph [0022] lines 8-10).

According to claim 21, the sensor device of claim 16 wherein said means for routing employs source address routing to communicate measurement data originating at said sensor device (paragraph [0033]).

According to claim 25, a method of operating a sensor net comprises: detecting access attempts by one or several mobile devices to multiple nodes within said sensor net (paragraph [0024] lines 12-13, paragraph [0036] lines 2-3, paragraph [0040] lines 1-4); determining probabilities of future access by said mobile devices to nodes of said sensor net (paragraph [0022] lines 1-4, paragraph [0024] lines 1-4, paragraph [0040] lines 4-5); distributing information related to said determined probabilities through said sensor net (paragraph [0022] lines 1-5, paragraph [0024] lines 7-10, paragraph [0038] lines 4-5, paragraph [0040] lines 4-5); and routing measurement data using said distributed information related to said determined probabilities (paragraph [0023] line 1, paragraph [0025] lines 1-2, paragraph [0028] lines 7-10).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Claims 1-12, 14-23, 25, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application No. 2003/0012143 to Chen et al. (hereinafter "Chen") in view of U.S. Patent Application No. 2004/0081166 to Stanforth et al. (hereinafter "Stanforth").

B. Claims 5 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Stanforth and further in view of U.S. Patent Application No. 2005/0122999 to Scherzer et al (hereinafter "Scherzer").

C. Claims 13 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Stanforth and further in view of U.S. Patent Application No. 2005/0122999 to Stephens et al (hereinafter "Stephens").

VII. ARGUMENT

A. Claims 1-12, 14-23, 25, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Stanforth.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success.

Finally, the prior art cited must teach or suggest all the claim limitations. Without admitting that the second criteria is satisfied, Appellant respectfully asserts that the Examiner's rejection fails to satisfy the first or third criteria.

Lack of Motivation

The Examiner opines that it would have been obvious "to include the sensor net of Stanforth [in the method of Chen] because sensors can monitor conditions such as environmental data and can provide that data to a central collection." *See* Final Action, pg. 3. It is well settled that the fact that references can be combined or modified is not sufficient to establish a prima facie case of obviousness. The language of the recited motivation is circular in nature, stating that it is obvious to make the modification because it is obvious to achieve the result. Such language is merely a statement that the reference can be modified, and does not state any desirability for making the modification. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 913 F.2d 680, 16 USPQ.2d 1430 (Fed. Cir. 1990). Thus, the motivation provided by the Examiner is improper, as the motivation must establish the desirability for making the modification. No valid suggestion has been made as to why a combination of Chen and Stanforth is desirable. Therefore, Appellant respectfully requests that the rejection of claims 1-12, 14-23, 25, 27, and 28 be reversed.

Nevertheless, Appellant respectfully points out that modifying the bandwidth allocation method of Chen to have the sensor net of Stanforth would be pointless. Chen's primary goal is to predict future mobile device traffic based on past demand and allocate bandwidth accordingly. *See, for example*, Chen [0015]. Modifying Chen to monitor conditions such as environmental data and provide that data to a central collection would render Chen less efficient by making it more difficult to accurately predict future use and properly allocate bandwidth. That is, inserting Stanforth's sensor net would unduly complicate Chen's relatively straightforward method of allocating bandwidth. Chen, at paragraph [0004], recites the need for efficiently allocating network resources among competing requests. Moreover, monitoring conditions such as environmental data and providing that data to a central collection would not help solve the problem of proper

bandwidth allocation. *See Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1276 (Fed. Cir. 2004). Therefore, there would be no suggestion or motivation to modify Chen as the Examiner proposes. Thus, Appellant requests reconsideration and reversal of the 35 U.S.C. § 103(a) rejection of record.

Failure to Teach or Suggest Every Claim Limitation

Independent Claim 1

Claim 1 recites "routing measurement data for collection to respective ones of said multiple nodes using said calculated probabilities." In the Final Action, the Examiner admits that Chen does not teach or suggest this limitation. *See* Final Action, pg. 3. The Examiner points to Stanforth, at paragraphs [0032] and [0033], to satisfy this limitation. *See* Advisory Action. At these citations, Stanforth describes a routing metric that is derived from the activity and/or inactivity of respective nodes. The routing metric is determined by the sum of deviations relating to the level of activity at the nodes. Further, at paragraph [0042], Stanforth describes that information is routed according to the level of activity at a node that may serve as router. As such, Stanforth routes data according to the level of activity at a given node or group of nodes. However, Stanforth does not route measurement data using calculated probabilities (e.g., of future access) as recited in claim 1. Moreover, there is no teaching or suggestion in Stanforth that data is routed for collection. As shown above, the combination of Chen and Stanforth does not teach or suggest routing measurement data for collection to respective ones of said multiple nodes using said calculated probabilities as recited in claim 1. Thus, the Examiner's suggested combination fails to comport the requirements of 35 U.S.C. § 103(a). Therefore, Appellant respectfully requests that this 35 U.S.C. § 103(a) rejection of record be reversed.

Claims 2-12 and 14-15 depend from claim 1 and inherit every limitation therefrom. As shown above, the combination of Chen and Stanforth fails to teach or suggest every limitation of claim 1. Therefore, claims 2-12 and 14-15 set forth limitations not taught by the combination of Chen and Stanforth and are patentable at least for the reasons set forth above with respect to claim 1. In addition, claims 2-12 and 14-15 set forth additional limitations not taught or suggested by the Examiner's proposed combination.

Dependent Claim 3

For example, claim 3 recites "wherein said detecting, calculating, and communicating occur repetitively causing routing of measurement data to vary dynamically in response to changes in access patterns associated with mobile devices." The Examiner points to Stanforth, at paragraphs [0032] and [0039], as satisfying this limitation. In doing so, the Examiner further opines "Stanforth teaches continually exchanging updates between nodes." *See* Final Action, pg. 4. As an initial matter, Appellant respectfully points out that merely exchanging updates is not the same as detecting, calculating, and communicating as recited in claim 3. As such, according to the Examiner's own interpretation, the proposed combination does not satisfy every claim limitation. Further, at the Examiner's citations Stanforth describes changing the rate of routing information in response to the change in routing tables. However, Stanforth does not teach or suggest causing routing of measurement data to vary dynamically in response to changes in access patterns associated with mobile devices. That is, merely updating routing rate information is not the same as dynamically varying the actual routing of measurement data. Therefore, Appellant respectfully requests that this 35 U.S.C. § 103(a) rejection of record be removed.

Dependent Claim 4

Claim 4 recites wherein said routing measurement data (e.g., for collection to multiple nodes using said calculated probabilities) varies in response to the time of day when said routing is performed. The Examiner points to Stanforth, at paragraphs [0034] and [0035], to satisfy this limitation. At the Examiner's citations, Stanforth describes taking a series of sum values, and plotting those values over time, to find a trend. Afterward, the "rate of exchange of routing information" can be increased or decreased based on the derivative (with respect to time) of the trend. First, a "rate of exchange of routing information" is not the same as routing measurement data. Also, the series of sums described in Stanforth does not necessarily vary in response to the time of day. There is no requirement that Stanforth's trend vary with respect to time. Merely plotting a series of sums taken over time (where the sums are in fact independent of time) does not teach or suggest wherein said routing measurement data varies in response to time. Therefore, Appellant respectfully requests that this 35 U.S.C. § 103(a) rejection of record be removed.

Dependent Claim 6

Claim 6 recites "selecting a second portion from said first portion of information using calculated probabilities of future access." The Examiner points to Stanforth, at paragraphs [0033]-[0035], to satisfy this limitation. *See* Final Action, pg. 5. At the Examiner's citation, Stanforth mentions a subject node and neighboring nodes, and the exchange of information there between. However, Stanforth is wholly silent as to as to selecting a second portion of information, much less selecting a second portion using calculated probabilities of future access, as recited in claim 6. Therefore, Appellant respectfully requests that this 35 U.S.C. § 103(a) rejection of record be removed.

Dependent Claim 7

Claim 7 recites "wherein said selecting (e.g., a second portion from said first portion of information using calculated probabilities of future access) removes information from said first portion using a cost function." The Examiner points to Chen, at paragraphs [0009] and [0015] lines 15-20, to satisfy this limitation. At the Examiner's citations, Chen discloses a cost function database 116. However, Chen's cost function database is disclosed as being a part of network resource manager 110 and that estimated probabilities are applied thereto. Chen's cost function database is not disclosed as removing information from a first portion of information as recited in claim 7. Therefore, Appellant respectfully requests that this 35 U.S.C. § 103(a) rejection of record be removed.

Dependent Claim 8

Claim 8 recites "wherein said cost function calculates a path cost to a collection point." The Examiner points to Chen, at paragraphs [0009] and [0015] lines 15-20, to satisfy this limitation. At the Examiner's citations, Chen discloses a cost function database 116. However, Chen's cost function database is disclosed as being a part of network resource manager 110 and that estimated probabilities are applied thereto. Chen's cost function database is not disclosed as calculating a path cost to a collection point as recited in claim 8. Therefore, Appellant respectfully requests that this 35 U.S.C. § 103(a) rejection of record be removed.

Dependent Claim 9

Claim 9 recites "wherein said cost function is a function of communication hops to a collection point." The Examiner points to Chen, at paragraphs [0009] and [0015] lines 15-20, to satisfy this limitation. At the Examiner's citations, Chen discloses a cost function database 116. However, Chen's cost function database is disclosed as being a part of network resource manager 110 and that estimated probabilities are applied thereto. Chen's cost function database is not disclosed as a function of communication hops to a collection point as recited in claim 9. Therefore, Appellant respectfully requests that this 35 U.S.C. § 103(a) rejection of record be removed.

Independent Claim 16

Claim 16 recites "routing measurement data within said sensor net in response to said means for calculating and said means for receiving." In the Final Action, the Examiner admits that Chen does not teach or suggest this missing limitation. *See* Final Action, pg. 3. The Examiner points to Stanforth, at paragraphs [0032] and [0033], to satisfy this limitation. *See* Advisory Action. At these citations, Stanforth describes a routing metric that is derived from the activity and/or inactivity of respective nodes. The routing metric is determined by the sum of deviations relating to the level of activity at the nodes. Further, at paragraph [0042], Stanforth describes that information is routed according to the level of activity at a node that may serve as router. As such, Stanforth routes data according to the level of activity at a given node or group of nodes. However, Stanforth does not route measurement data using calculated probabilities (e.g., of future access) as recited in claim 1. Moreover, there is no teaching or suggestion in Stanforth that data is routed for collection. Stanforth further describes data and control packets, environmental data, node update information, and the like. *See* Stanforth paragraphs [0022]-[0023]. Even if these items could be construed as measurement data, these citations do not teach or suggest routing measurement data in response to said means for calculating and said means for receiving. Put simply, there is no suggestion that such data is routed in response to calculating or receiving. As shown above, the combination of Chen and Stanforth does not teach or suggest routing measurement data within said sensor net in response to said means for calculating and said means for receiving as recited in claim 16. Thus, the Examiner's suggested combination fails to comport the

requirements of 35 U.S.C. § 103(a). Therefore, Appellant respectfully requests that this 35 U.S.C. § 103(a) rejection of record be reversed.

Claims 17-23 depend from claim 16 and inherit every limitation therefrom. As shown above, the combination of Chen and Stanforth fails to teach or suggest every limitation of claim 1. Therefore, claims 17-23 set forth limitations not taught by the combination of Chen and Stanforth and are patentable at least for the reasons set forth above with respect to claim 16. In addition, claims 17-23 set forth additional limitations not taught or suggested by the Examiner's proposed combination.

Dependent Claim 18

For example, claim 18 recites "wherein probabilities of access are correlated to a time of day." The Examiner points to Stanforth, at paragraphs [0034] and [0035], to satisfy this limitation. At the Examiner's citations, Stanforth describes taking a series of sum values, and plotting those values over time to find a trend. Afterward, the "rate of exchange of routing information" can be increased or decreased based on the derivative (with respect to time) of the trend. The series of sums described in Stanforth does not necessarily vary in response to the time of day. There is no requirement that Stanforth's trend vary with respect to time. Merely plotting a series of sums taken over time (where the sums are in fact independent of time) does not teach or suggest wherein probabilities of access are correlated to a time of day. Therefore, Appellant respectfully requests that this 35 U.S.C. § 103(a) rejection of record be removed.

Dependent Claim 21

Claim 21 recites "wherein said means for routing employs source address routing to communicate measurement data originating at said sensor device." The Examiner points to Stanforth, at paragraph [0029] lines 1-5, to satisfy this limitation. However, at the Examiner's citations Stanforth merely describes a node increasing its update rate in response to a request to send data. However, Stanforth is wholly silent as to employing source address routing to communicate measurement data as recited in claim 21. Therefore, Appellant respectfully requests that this 35 U.S.C. § 103(a) rejection of record be removed.

Independent Claim 25

Claim 25 recites "routing measurement data using said distributed information related to said determined probabilities." In the Final Action, the Examiner admits that Chen does not teach or suggest this missing limitation. *See* Final Action, pg. 3. The Examiner points to Stanforth, at paragraphs [0032] and [0033], to satisfy this limitation. *See* Advisory Action. At these citations, Stanforth describes a routing metric that is derived from the activity and/or inactivity of respective nodes. The routing metric is determined by the sum of deviations relating to the level of activity at the nodes. Further, at paragraph [0042], Stanforth describes that information is routed according to the level of activity at a node that may serve as router. As such, Stanforth routes data according to the level of activity at a given node or group of nodes; however, Stanforth does not route measurement data using calculated probabilities (e.g., of future access) as recited in claim 25. As shown above, the combination of Chen and Stanforth does not teach or suggest routing measurement data using said distributed information related to said determined probabilities 25. Thus, the Examiner's suggested combination fails to comport the requirements of 35 U.S.C. § 103(a). Therefore, Appellant respectfully requests that this 35 U.S.C. § 103(a) rejection of record be removed.

Claims 27-28 depend from claim 25 and inherit every limitation therefrom. As shown above, the combination of Chen and Stanforth fails to teach or suggest every limitation of claim 1. Therefore, claims 27-28 set forth limitations not taught by the combination of Chen and Stanforth and are patentable at least for the reasons set forth above with respect to claim 25.

B. Claims 5 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Stanforth and further in view of Scherzer.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art cited must teach or suggest all the claim limitations. Without admitting

that the second criteria is satisfied, Appellant respectfully asserts that the Examiner's rejection fails to satisfy the first or third criteria.

Lack of Motivation

The Examiner opines that it would have been obvious "to modify the teachings of Chen and Stanforth to include the time window average of Scherzer in order to allow a plurality of users to use the network. *See* Final Action, pg. 10. As shown above, the Examiner has not provided sufficient motivation for combining Chen and Stanforth. Moreover, the Examiner's statement of motivation of further combining Scherzer is also insufficient. It is well settled that the fact that references can be combined or modified is not sufficient to establish a prima facie case of obviousness, M.P.E.P. §2143.01. Such language is merely a statement that the reference can be modified, and does not state any desirability for making the modification. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ.2d 1430 (Fed. Cir. 1990). Thus, the motivation provided by the Examiner is improper, as the motivation must establish the desirability for making the modification. No valid suggestion has been made as to why a combination of Chen, Stanforth, and Scherzer is desirable. Therefore, the rejection of claims 5 and 25 should be reversed.

Failure to Teach or Suggest Every Claim Limitation

Claims 5 and 26 depend from claims 1 and 25, respectively, and inherit every limitation of the claim from which they depend. As shown above, the combination of Chen and Stanforth fails to teach or suggest every limitation of claims 1 and 25. Also, Scherzer is not relied upon to teach or suggest the missing limitations. Therefore, claims 5 and claim 26 set forth limitations not taught by the combination of Chen, Stanforth, and Scherzer and are patentable at least for the reasons set forth above with respect to claims 1 and 25. Further, claims 5 and 26 set forth additional limitations not taught or suggested by the Examiner's proposed combination.

Dependent Claim 5

For example, claims 5 recites "wherein said calculating calculates a time window average of detected access attempts." The Examiner points to Scherzer, at paragraph [0066], to satisfy this limitation. At the Examiner's citation, Scherzer discloses estimating channel traffic load through, for instance, the volume of data packets transmitted in preceding window or finding the average volume of data packets transferred. Merely measuring data flow over a period of time or finding an average volume of data flow is not the same as calculating a time window of detected access attempts. That is, merely counting data packets transferred from between a first time and a second time, or calculating the average volume of data packets transferred, has nothing to do with actually calculating a time window. Therefore, Appellant respectfully requests that this 35 U.S.C. § 103(a) rejection of record be removed.

C. Claims 13 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Stanforth and further in view of Stephens.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art cited must teach or suggest all the claim limitations. *see* M.P.E.P. § 2143. Without admitting that the second criteria is satisfied, Appellant respectfully asserts that the Examiner's rejection fails to satisfy the first and third criteria.

Lack of Motivation

The Examiner opines that it would have been obvious "to modify the teachings of Chen and Stanforth to include to include the pseudo-random algorithm of Stephens because a pseudo-random algorithm will keep surrounding nodes from being overloaded with a greater percentage of information being transmitted." *See* Final Action, pg. 10. As shown above, the Examiner has not provided sufficient motivation for combining Chen and Stanforth. Moreover, the Examiner's statement of motivation of further combining Scherzer is also insufficient. It is well settled that the fact that references can be combined or modified is not sufficient to establish a prima facie case of obviousness, M.P.E.P. §2143.01. Such language

is merely a statement that the reference can be modified, and does not state any desirability for making the modification. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ.2d 1430 (Fed. Cir. 1990). Thus, the motivation provided by the Examiner is improper, as the motivation must establish the desirability for making the modification. No valid suggestion has been made as to why a combination of Chen, Stanforth, and Scherzer is desirable. Therefore, the rejection of claims 13 and 24 should be reversed.

Failure to Teach or Suggest Every Claim Limitation

Claims 13 and 24 depend from claims 1 and 16, respectively, and inherit every limitation of the claim from which they depend. As shown above, the combination of Chen and Stanforth fails to teach or suggest every limitation of claims 1 and 16. Also, Stephens is not relied upon to teach or suggest the missing limitations. Therefore, claims 13 and claim 24 set forth limitations not taught by the combination of Chen, Stanforth, and Stephen and are patentable at least for the reasons set forth above with respect to claims 1 and 16. Further, claims 13 and 24 set forth additional limitations not taught or suggested by the Examiner's proposed combination.

VIII. CLAIMS APPENDIX

A copy of the claims involved in the present appeal is attached hereto in the Claims Appendix.

IX. EVIDENCE APPENDIX

No evidence pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132, or entered by or relied upon by the Examiner is being submitted. Hence, no such Appendix is included.

X. RELATED PROCEEDINGS APPENDIX

No related proceedings are referenced in II above. Also, no copies of decisions in related proceedings are provided. Hence, no such Appendix is included.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as Express Mail, Airbill No. EV568255152US in an envelope addressed to: MS Appeal Brief – Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Deposit: April 28, 2006

Typed Name: Laura Horton

Signature: Laura Horton

Respectfully submitted,

By _____
Jody C. Bishop
Reg. No.: 44,034
Date: April 28, 2006
Telephone No. (214) 855-8007

CLAIMS APPENDIX

Claims Involved in the Appeal of Application Serial No. 10/807,070

1. (Original) A method of operating a sensor net, comprising:

detecting access attempts by one or several mobile devices to multiple nodes within said sensor net;

calculating a respective probability of future access by a mobile device for each of said multiple nodes in response to said detecting;

communicating information related to said calculated probabilities through said sensor net; and

routing measurement data for collection to respective ones of said multiple nodes using said calculated probabilities.

2. (Original) The method of claim 1 further comprising:

receiving probabilities of future access from a mobile device by least one node of said sensor net and communicating said received probabilities through said sensor net, wherein said routing further uses said received probabilities to route measurement data.

3. (Original) The method of claim 1 wherein said detecting, calculating, and communicating occur repetitively causing routing of measurement data to vary dynamically in response to changes in access patterns associated with mobile devices.

4. (Original) The method of claim 1 wherein said routing measurement data varies in response to the time of day when said routing is performed.

5. (Original) The method of claim 1 wherein said calculating calculates a time window average of detected access attempts.

6. (Original) The method of claim 1 wherein said communicating calculated probabilities comprises:

receiving a first portion of said information at a first node in said sensor net;

selecting a second portion from said first portion of information using calculated probabilities of future access; and

transmitting said second portion from said first node to a second node in said sensor net.

7. (Original) The method of claim 6 wherein said selecting removes information from said first portion using a cost function.

8. (Original) The method of claim 7 wherein said cost function calculates a path cost to a collection point.

9. (Original) The method of claim 8 wherein said cost function is a function of communication hops to a collection point.

10. (Original) The method of claim 1 wherein said routing comprises:

selecting a destination collection point using said communicated information.

11. (Original) The method of claim 1 wherein said routing comprises:

selecting multiple destination collection points using said communicated information.

12. (Original) The method of claim 11 wherein said selecting multiple destination collection points comprises:

calculating a group probability of access to at least one of said multiple destination collection points; and

comparing said calculated group probability of access to a threshold value.

13. (Original) The method of claim 1 wherein said routing comprises:

using a pseudo-random algorithm to distribute measurement data beyond optimal paths identified using said communicated information.

14. (Original) The method of claim 1 wherein said communicating comprises:

communicating information that is indicative of a change in previously communicated information related to said probabilities of future access.

15. (Original) The method of claim 1 wherein said mobile devices are cellular devices.

16. (Previously Presented) A sensor device for operation in a sensor net comprising:

means for detecting and recording attempts to access measurement data by mobile devices;

means for calculating a probability of future access by a mobile device to said sensor device using said recorded access attempts;

means for receiving information related to probabilities of future access associated with other sensor devices within said sensor net;

means for communicating information related to probabilities of future access to other sensor devices; and

means for routing measurement data within said sensor net in response to said means for calculating and said means for receiving.

17. (Original) The sensor device of claim 16, comprising:

means for receiving probabilities of future access from a mobile device, wherein said means for routing further operates in response to said means for receiving probabilities from a mobile device.

18. (Original) The sensor device of claim 16 wherein probabilities of access are correlated to a time of day.

19. (Previously Presented) The sensor device of claim 16 wherein said means of communicating information related to probabilities of future access to other sensor devices limits communication to information associated with a subset of sensor devices within said sensor net.

20. (Original) The sensor device of claim 19 wherein said means for communicating selects said subset of sensor devices in relation to respective probabilities of access to said subset of sensor devices and a cost function.

21. (Original) The sensor device of claim 16 wherein said means for routing employs source address routing to communicate measurement data originating at said sensor device.

22. (Original) The sensor device of claim 21 wherein said means for routing selects a plurality of collection points using said source address routing.

23. (Original) The sensor device of claim 22 wherein said plurality of collection points are selected by determining a probability of access to at least one of said plurality of collection points.

24. (Original) The sensor device of claim 19 wherein said means for routing includes randomization logic for directing measurement data beyond optimal paths defined by probabilities of future access to other sensor devices.

25. (Previously Presented) A method of operating a sensor net comprising:

detecting access attempts by one or several mobile devices to multiple nodes within said sensor net;

determining probabilities of future access by said mobile devices to nodes of said sensor net;

distributing information related to said determined probabilities through said sensor net; and

routing measurement data using said distributed information related to said determined probabilities.

26. (Original) The method of claim 25 wherein said determining probabilities comprises:

calculating time window averages of access attempts by mobile devices to respective nodes of said sensor net.

27. (Original) The method of claim 25 wherein said determining comprises:

receiving information from a mobile device related to future access activity of mobile devices.

28. (Original) The method of claim 25 wherein said distributing information comprises:

receiving at a first node identification of a plurality of collection points;

selecting a subset of said plurality of collection points using a cost function related to communicating to the plurality of collection points; and

communicating information related to said determined probabilities limited to said subset to a second node.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.